## **REMARKS**

This response is submitted in response to the Final Office Action mailed November 5, 2003, to request reconsideration of the rejection of claims 1-20 as set forth therein.

In the Final Official Action, the Examiner now rejects claims 1-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,999,214 to Inagaki (hereinafter "Inagaki") in view of Pavlovic et al. "Integration of audio/visual information for use in human-computer intelligent interaction," Image Processing, 1997 Proceedings IEEE, pages 121-124 (hereinafter "Pavlovic").

In response, Applicant respectfully traverses the Examiner's rejection under 35 U.S.C. § 103(a) for at least the reasons set forth below.

Claim 1 recites:

"a processor ... configured ... to change a PIP display characteristic in response to a received audio command and a related gesture from a user."

Independent claims 11, 15, 19 and 20 contain similar recitations regarding an audio command or indication and a related gesture.

As discussed in the previous Response, Inagaki discloses a video conferencing system that detects the voice of a speaking attendee and highlights the PIP of the speaking attendee to distinguish the same from the other attendees. Therefore, Inagaki does not disclose or suggest " a processor ... configured ... to change a PIP display characteristic in response to a received audio command and a related gesture from a user." Inagaki merely detects the presence of speech.

Inagaki does not teach the detection of a content of the speech to determine if a command is being spoken. Therefore, as discussed more fully below, since the system of Inagaki does not recognize and/or respond to spoken commands, there is no motivation or suggestion to combine it with the system of Pavlovic that is directed to recognition of spoken commands.

Recently the U.S. Court of Appeals for the Federal Circuit (the "Federal Circuit") restated the legal test applicable to rejections under 35 U.S.C. § 103(a) (*In re Rouffet*, 47 USPQ2d 1453 (Fed. Cir., July 15, 1998)). The Court stated:

[V]irtually all [inventions] are combinations of old elements. Therefore an Examiner may often find every element of a claimed invention in the prior art. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be "an illogical and inappropriate process by which to determine patentability." To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. The Board [of Appeals] did not, however, explain what specific understanding or technological principle within the knowledge of one of ordinary skill in the art would have suggested the combination. ... To counter this potential weakness in the obviousness construct the suggestion to combine requirements stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness.

In re Rouffet, 47 USPQ2d 1457-58 (Fed. Cir., July 15, 1998) (citations omitted, emphasis added).

More recently, the Federal Circuit again dealt with what is required to show a motivation to combine references under 35 U.S.C. § 103(a). In this case the court reversed the decision of the Board of appeals stating:

[R]ather then pointing to specific information in Holiday or Shapiro that suggest the combination..., the Board instead described in detail the similarities between the Holiday and Shapiro references and the claimed invention, noting that one reference or the other-in combination with each other... described all of the limitations of the pending claims. Nowhere does the Board particularly identify any suggestion, teaching, or motivation to combine the ... references, nor does the Board make specific-or even inferential-findings concerning the identification of the relevant art, the level of ordinary skill in the art, the nature of the problem to be solved, or any factual findings that might serve to support a proper obviousness analysis.

In re Dembiczak, 50 USPQ2d 1614, 1618 (Fed. Cir., April 28, 1999) (citations omitted).

Thus, from both *In re Rouffet* and *In re Dembiczak* it is clear that the Federal Circuit requires a specific identification of a suggestion, motivation, or teaching why one of ordinary skill in the art would have been motivated to select the references and combine them. This the Examiner has not done. The Examiner only states that it would be obvious "to one of ordinary skill in the art at the time of the invention was made to use a 'received audio command and a related gesture from a user' as taught by Pavlovic in the apparatus of Inagaki, because of the motivation provided by Pavlovic "Psychological studies, for example, show that people prefer to use hand gestures in combination with speech in a virtual environment, since they allow the user to interact without special training or special apparatus'." (see page 3 of the Final Official Action, emphasis in original).

However, Applicant respectfully submits that the motivation argued by the Examiner could have only been gleaned from the present application. As discussed above, Inagaki neither discloses nor suggests the use or either a hand signal or audio command, therefore, those of ordinary skill in the art would not been suggested or motivated to combine its teachings with those of Pavlovic.

Thus, Applicant respectfully submits that the Examiner, without identifying a suggestion, motivation, or teaching for combining the references, has used impermissible hindsight to reject claims 1-20 under 35 U.S.C. 103(a). As discussed above, the Federal Circuit in *In re Rouffet* stated that virtually all inventions are combinations of old elements. Therefore an Examiner may often find every element of a claimed invention in the prior art. To prevent the use of hind sight based on the invention to defeat patentability of the invention, the Examiner is required to show a motivation to combine the references that create the case of obviousness. Applicants respectfully submit that the Examiner has not met this burden.

In light of the state of the law as set forth by the Federal Circuit and the Examiner's lack of specificity with regard to the motivation to combine the cited references, the applicant respectfully

submits that the rejections for obviousness under 35 U.S.C. § 103(a) lack the requisite motivation and must be withdrawn.

Therefore, Applicant respectfully submits that the rejection of claims 1-20 for obviousness under 35 U.S.C. § 103(a) lacks the requisite motivation and must be withdrawn.

Furthermore, with regard to independent claim 11, the same recites:

"determining whether the received audio indication is one of a plurality of expected audio indications:

analyzing a gesture of the user if the received audio indication is one of the plurality of expected audio indications"

The Applicant respectfully submits that neither of the cited references teach or suggest the recited features of claim 11. As discussed above, Inagaki merely teaches a voice detection to determine whether an attendee is speaking. Thus, Inagaki does not teach or suggest "determining whether the received audio indication is one of a plurality of expected audio indications." Pavlovic teaches the user issuing a spoken command and gesture simultaneously (page 123, right column) because studies show speech and gestures are preferred by some people and because they are produced by the same mental concept. Page 123 of Pavlovic states:

"...the user utters the command 'select this', while <u>simultaneously</u> pointing at an object. To perform an object, the user utters a command such as 'move left' while <u>simultaneously</u> performing the 'move left' gestural action." (emphasis added).

Thus, Pavlovic does not teach or suggest "analyzing a gesture of the user if the received audio indication is one of the plurality of expected audio indications." Claim 20 contains similar

recitations and patentably distinguishes over the cited references for at least the same reasons as set forth above with regard to claim 11.

Still further, with regard to claim 15, the same contains program segments for performing similar steps as recited in claim 11 and patentably distinguishes over the cited references for at least the same reasons as set forth above with regard to claim 11.

Therefore, assuming arguendo that the combination of Inagaki and Pavlovic is proper (which Applicant maintains it is not), at least independent claims 11, 15, and 20 are not rendered obvious by the cited references because neither the Inagaki patent nor the Pavlovic publication, whether taken alone or in combination, teach or suggest a method having the features recited therein and discussed above. Accordingly, claims 11, 15, and 20 patentably distinguish over the prior art and are allowable. Claims 12-18 being dependent upon claims 11 and 15 are thus allowable therewith. Consequently, the Examiner is respectfully requested to withdraw the rejection of at least claims 11-18, 20 under 35 U.S.C. § 103(a).

Lastly, Applicant again respectfully submits that at least dependent claims 2, 5, and 6 patentably distinguish over the cited references independently of their base claim (claim 1) and are allowable.

With regard to claim 2, the same recites "the PIP display characteristic is at least one of a position of the PIP on the display and a display size of the PIP." As discussed above, Inagaki merely discloses a video conferencing system that detects the voice of a speaking attendee and <u>highlights</u> the PIP of the speaking attendee to distinguish the same from the other attendees. In the Final Official Action, the Examiner cites Figure 8a of Inagaki as showing the features of claim 2. However, Figure 8a merely shows highlighting the PIP display of speaker B corresponding to the speaker (B) in the

main display. Thus, Inagaki does not change "at least one of a position of the PIP on the display and a display size of the PIP" as is recited in claim 2.

With regard to claims 5 and 6, claim 5 recites

"the processor is configured to analyze image information received from the user after the audio indication is received to identify the change in the PIP display characteristic that is expressed by the received gesture."

In the Final Official Action, the Examiner argues that Figures 8a and 8b of Inagaki and Figures 6-8 of Pavlovic show the features of claims 5 and 6. However, as discussed above with regard to claim 2, Figures 8a and 8b merely show highlighting a PIP display corresponding to the speaker in the main display (speaker B in Figure 8a and speaker D in Figure 8B). Furthermore, the description on page 123 of Pavlovic discussed above with regard to claim 11 accompanies Figures 6-8 cited by the Examiner. Thus, as concluded above, Pavlovic teaches the user issuing a spoken command and gesture <u>simultaneously</u>.

Therefore, at least claims 2, 5, and 6, patentably distinguish over the cited references independently of their base claim (1) and are allowable.

The above amendments and remarks establish the patentable nature of all the claims currently in this case. Issuance of a Notice of Allowance and passage to issue of these claims are

therefore respectfully solicited. If the Examiner believes that a telephone conference with Applicant's attorney would be advantageous to the disposition of this case, the Examiner is requested to telephone the undersigned.

Respectfully submitted,

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